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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS	3	JUN 06	KOREAPAT updated with 41,000 documents
NEWS	4	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS	5	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS	6	JUN 25	CA/CAPLUS and USPAT databases updated with IPC reclassification data
NEWS	7	JUN 30	AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS	8	JUN 30	EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS	9	JUN 30	STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS	10	JUN 30	STN AnaVist enhanced with database content from EPFULL
NEWS	11	JUL 28	CA/CAPLUS patent coverage enhanced
NEWS	12	JUL 28	EPFULL enhanced with additional legal status information from the epoLine Register
NEWS	13	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS	14	JUL 28	STN Viewer performance improved
NEWS	15	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS	16	AUG 13	CA/CAPLUS enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS	17	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS	18	AUG 15	CAPLUS currency for Korean patents enhanced
NEWS	19	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS	20	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS	21	SEP 25	CA/CAPLUS current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS	22	SEP 26	WPIDS, WPINDEX, and WPIX coverage of Chinese and Korean patents enhanced
NEWS	23	SEP 29	IFICLS enhanced with new super search field
NEWS	24	SEP 29	EMBASE and EMBAL enhanced with new search and display fields
NEWS	25	SEP 30	CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents
NEWS	26	OCT 07	EPFULL enhanced with full implementation of EPC2000
NEWS	27	OCT 07	Multiple databases enhanced for more flexible patent

number searching

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 09:10:43 ON 09 OCT 2008

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:10:51 ON 09 OCT 2008

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STRUCTURE FILE UPDATES: 7 OCT 2008 HIGHEST RN 1058345-57-5

DICTIONARY FILE UPDATES: 7 OCT 2008 HIGHEST RN 1058345-57-5

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=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 963

L1 SCREEN CREATED

=>
Uploading C:\Program Files\STNEXP\Queries\10551882.str

L2 STRUCTURE UPLOADED

=> que L2 AND L1

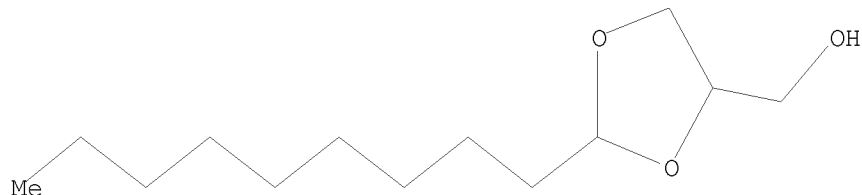
L3 QUE L2 AND L1

=> d

L3 HAS NO ANSWERS

L1 SCR 963

L2 STR



Structure attributes must be viewed using STN Express query preparation.

L3 QUE ABB=ON PLU=ON L2 AND L1

=> s l3 sss full

FULL SEARCH INITIATED 09:11:32 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 32243 TO ITERATE

100.0% PROCESSED 32243 ITERATIONS

31 ANSWERS

SEARCH TIME: 00.00.01

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=>Testing the current file.... screen

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Uploading C:\Program Files\STNEXP\Queries\10551882a.str

L5 STRUCTURE UPLOADED

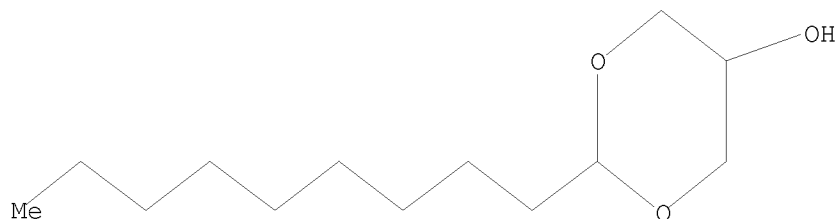
=> que L5

L6 QUE L5

=> d

L6 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.
L6 QUE ABB=ON PLU=ON L5

=> s l6 sss full
FULL SEARCH INITIATED 09:12:12 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 25636 TO ITERATE

100.0% PROCESSED 25636 ITERATIONS 13 ANSWERS
SEARCH TIME: 00.00.01

L7 13 SEA SSS FUL L5

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
 ENTRY SESSION
FULL ESTIMATED COST 356.72 356.93

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008
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FILE COVERS 1907 - 9 Oct 2008 VOL 149 ISS 15
FILE LAST UPDATED: 8 Oct 2008 (20081008/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

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=> d his

(FILE 'HOME' ENTERED AT 09:10:43 ON 09 OCT 2008)

FILE 'REGISTRY' ENTERED AT 09:10:51 ON 09 OCT 2008

L1 SCREEN 963
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 31 S L3 SSS FULL
L5 STRUCTURE UPLOADED
L6 QUE L5
L7 13 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008

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L8          42 L4

=> s 17
L9          18 L7

=> s 18 and 19
L10         7 L8 AND L9

=> dup rem
ENTER L# LIST OR (END):110
PROCESSING COMPLETED FOR L10
L11         7 DUP REM L10 (0 DUPLICATES REMOVED)

=> d 111 1-7 ibib ab hitstr
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L11 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:      2004:841740 CAPLUS
DOCUMENT NUMBER:       141:320106
TITLE:                 Use of cyclic acetals and ketals for improved
                        penetration of drugs through cell and organ barriers
INVENTOR(S):           Harder, Achim; Heep, Iris; Herrmann, Stefan;
                        Grunkemeyer, Jeffry-Lynn; Kalbe, Jochen; Mehlhorn,
                        Heinz; Schmidt, Juergen; Schmahl, Guenther
PATENT ASSIGNEE(S):    Bayer HealthCare AG, Germany
SOURCE:                Ger. Offen., 21 pp.
                        CODEN: GWXXBX
DOCUMENT TYPE:         Patent
LANGUAGE:              German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10314976	A1	20041014	DE 2003-10314976	20030402
CA 2520919	A1	20041014	CA 2004-2520919	20040325
WO 2004087117	A2	20041014	WO 2004-EP3155	20040325
WO 2004087117	A3	20050210		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1613354	A2	20060111	EP 2004-723211	20040325
EP 1613354	B1	20080820		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
US 20070270503	A1	20071122	US 2007-551882	20070115
PRIORITY APPLN. INFO.:				
			DE 2003-10314976	A 20030402
			WO 2004-EP3155	W 20040325

```
OTHER SOURCE(S):      MARPAT 141:320106
AB The invention concerns the use of cyclic acetals and ketals for improved
penetration of drugs through cell and organ barriers, e.g. blood-brain
barrier and placenta barrier. Thus a solution was prepared that contained (g):
mebendazole 0.75; 2-nonyl-4-methanol-1,3-dioxalane and
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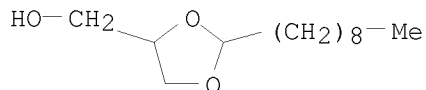
2-nonyl-5-hydroxy-1,3-dioxane at a ratio of 9:1 3.73; N-methylpyrrolidone to 100.

IT 1020-81-1 185902-72-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of cyclic acetals and ketals for improved penetration of drugs through cell and organ barriers)

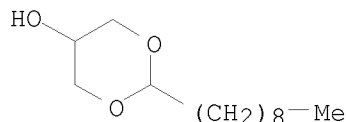
RN 1020-81-1 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl- (CA INDEX NAME)



RN 185902-72-1 CAPLUS

CN 1,3-Dioxan-5-ol, 2-nonyl- (CA INDEX NAME)



L11 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:450274 CAPLUS

DOCUMENT NUMBER: 131:73660

TITLE: Preparation of long-chain cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes

INVENTOR(S): Piasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlewska, Urszula

PATENT ASSIGNEE(S): Politechnika Wroclawska, Pol.

SOURCE: Pol., 4 pp.

CODEN: POXXA7

DOCUMENT TYPE: Patent

LANGUAGE: Polish

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PL 175837	B1	19990226	PL 1994-306515	19941223

PRIORITY APPLN. INFO.: PL 1994-306515 19941223

OTHER SOURCE(S): CASREACT 131:73660; MARPAT 131:73660

AB Diastereoisomers of cyclic glycerol acetals (I; n = 7-13) and their trans-isomers (II), intermediates for the manufacture of surfactants, were prepared by transacetalization of 4-component mixts. of 2 diastereoisomer pairs comprising I, II, cis-2-alkyl-4-hydroxymethyl-1,3-dioxolane (III) and its trans-isomer IV, preferably in hexane/C6H6 mixts., in the presence of p-MeC6H4SO3H catalyst. I and II crystallize together from the reaction mixture and are separated by fractional distillation For example, a solution containing

0.0565 kg of a mixture comprising cis-2-nonyl-5-hydroxy-1,3-dioxane (V) 33, trans-2-nonyl-5-hydroxy-1,3-dioxane (VI) 23, cis-2-nonyl-4-hydroxymethyl-1,3-dioxolane 25 and trans-2-nonyl-4-hydroxymethyl-1,3-dioxolane 19% and 3 + 10-4 kg p-MeC6H4SO3H·H2O in 0.050 dm3 of 80:20 hexane/C6H6 mixture was kept for 2 days at ambient temperature and 5 days at 278 °K to give 0.0352 kg crystals which were separated by filtration, dried a distilled

to

give V (b. 442 °K/1.33 kPa; m. 320–320.5 °K) and VI (b. 461 °K/1/33 kPa; m. 335–336°).

IT 18445-26-6P 18445-27-7P

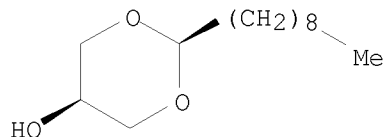
RL: PUR (Purification or recovery); PREP (Preparation)

(preparation of long-chain cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes by transacetalization with cis- and trans-2-alkyl-4-hydroxymethyl-1,3-dioxolanes)

RN 18445-26-6 CAPLUS

CN 1,3-Dioxan-5-ol, 2-nonyl-, cis- (CA INDEX NAME)

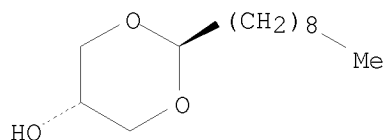
Relative stereochemistry.



RN 18445-27-7 CAPLUS

CN 1,3-Dioxan-5-ol, 2-nonyl-, trans- (CA INDEX NAME)

Relative stereochemistry.



IT 18445-13-1 18445-14-2

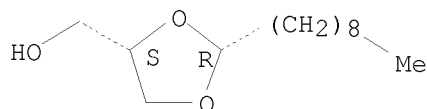
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of long-chain cis- and trans-2-alkyl-5-hydroxy-1,3-dioxanes by transacetalization with cis- and trans-2-alkyl-4-hydroxymethyl-1,3-dioxolanes)

RN 18445-13-1 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4S)-rel- (CA INDEX NAME)

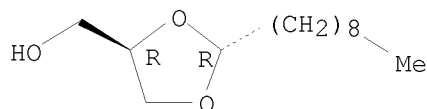
Relative stereochemistry.



RN 18445-14-2 CAPLUS

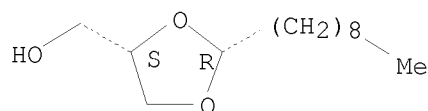
CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



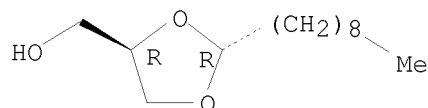
DOCUMENT NUMBER: 126:117936
ORIGINAL REFERENCE NO.: 126:22765a,22768a
TITLE: Acetals and ethers. Part XXII. An efficient method for the preparation of pure long-chain cis- and trans-2-n-alkyl-5-hydroxy-1,2-dioxanes
AUTHOR(S): Piasecki, Andrzej; Burczyk, Bogdan; Sokolowski, Adam; Kotlewska, Urszula
CORPORATE SOURCE: Inst. Org. Polymer Technol., Technical Univ. Wroclaw, Wroclaw, 50-370, Pol.
SOURCE: Synthetic Communications (1996), 26(22), 4145-4151
CODEN: SYNCAV; ISSN: 0039-7911
PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title compds., e.g., I (R = n-heptyl, n-nonyl, n-undecyl), were obtained with high yields from four-component mixts. of glycerol acetals by combining the transacetalization reaction with the crystallization process followed by fractional distillation
IT 18445-13-1P 18445-14-2P 18445-26-6P 18445-27-7P
RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of long-chain alkylhydroxydioxanes)
RN 18445-13-1 CAPLUS
CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.



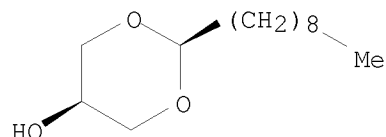
RN 18445-14-2 CAPLUS
CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



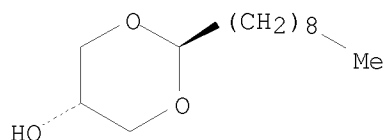
RN 18445-26-6 CAPLUS
CN 1,3-Dioxan-5-ol, 2-nonyl-, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 18445-27-7 CAPLUS
CN 1,3-Dioxan-5-ol, 2-nonyl-, trans- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:693638 CAPLUS

DOCUMENT NUMBER: 126:103649

ORIGINAL REFERENCE NO.: 126:19997a

TITLE: Polymer-supported acetals as systems for protection and controlled delivery of volatile aldehydes

AUTHOR(S): Ceita, L.; Gavina, P.; Lopez Lavernia, N.; Llopis, C.; Mestres, R.; Tortajada, A.

CORPORATE SOURCE: Departament de Quimica Organica, Universitat de Valencia, Dr. Moliner 50, Burjassot, 46100, Valencia, Spain

SOURCE: Reactive & Functional Polymers (1996), 31(3), 265-272
CODEN: RFPOF6; ISSN: 1381-5148

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polymer-supported acetals, 2-nonyl-1,3-dioxolane-4-methanol (I) and 2-nonyl-1,3-dioxolane-4-ethanol were prepared on an Merrifield resin support. Hydrolysis of I gave decanal. Decanal was also prepared by hydrolysis of polymer-supported 2-nonyl-4-phenyl-1,3-dioxolane.

IT 1020-81-1DP, polymer-supported 1020-81-1P

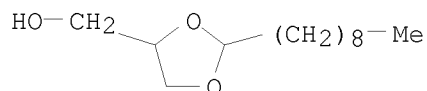
185902-72-1DP, polymer-supported 185902-72-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aldehydes via hydrolysis of polymer-supported acetals)

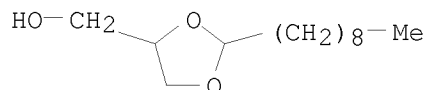
RN 1020-81-1 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl- (CA INDEX NAME)



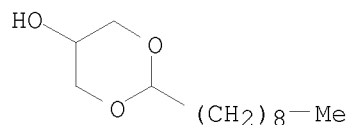
RN 1020-81-1 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl- (CA INDEX NAME)

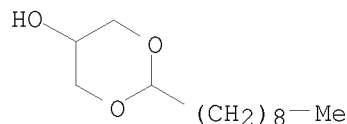


RN 185902-72-1 CAPLUS

CN 1,3-Dioxan-5-ol, 2-nonyl- (CA INDEX NAME)



RN 185902-72-1 CAPLUS
CN 1,3-Dioxan-5-ol, 2-nonyl- (CA INDEX NAME)



L11 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:2524 CAPLUS

DOCUMENT NUMBER: 116:2524

ORIGINAL REFERENCE NO.: 116:507a,510a

TITLE: Products of the reductive degradation of
 α -(acyloxy)plasmalogens from bovine lipids with
lithium aluminum hydride

AUTHOR(S): Lutz, Arnulf; Knoerr, Walter; Spitteller, Gerhard

CORPORATE SOURCE: Univ. Bayreuth, Bayreuth, D-8580, Germany

SOURCE: Liebigs Annalen der Chemie (1991), (11), 1151-5
CODEN: LACHDL; ISSN: 0170-2041

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 116:2524

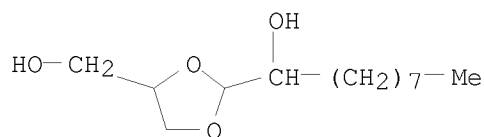
AB If bovine tissue lipids are treated with LiAlH₄, two types of unexpected products are detectable: 1-acylglycerols and α -hydroxylated glycerol acetals. This fact was assumed to indicate the presence of α -(acyloxy)plasmalogens, previously unknown class of mammalian tissue lipids. To confirm this assumption, the model compound possessing an enol ether-enol acetate structure was synthesized and treated with LiAlH₄. Corresponding derivs. of 1-acylglycerols as well as α -hydroxylated glycerol acetals were produced, thus confirming the existence of α -(acyloxy)plasmalogens in tissue of natural origin. They are detectable by GC and GC-mass spectrometry after conversion of free hydroxy groups with diazomethane/silica gel into the corresponding Me ether derivs.

IT 136132-46-2P 136132-47-3P

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation) (formation of, in acyloxyplasmalogen reductive degradation)

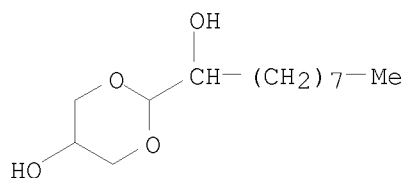
RN 136132-46-2 CAPLUS

CN 1,3-Dioxolane-2,4-dimethanol, α 2-octyl- (CA INDEX NAME)



RN 136132-47-3 CAPLUS

CN 1,3-Dioxane-2-methanol, 5-hydroxy- α -octyl- (CA INDEX NAME)



L11 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:551590 CAPLUS

DOCUMENT NUMBER: 87:151590

ORIGINAL REFERENCE NO.: 87:23971a,23974a

TITLE: Acrolein acetals and their derivatives. (II). The structure and isomerization of glycerol acetals

AUTHOR(S): Stefanovic, Gjorgje; Petrovic, Gjorgje

CORPORATE SOURCE: Inst. Chem., Fac. Sci., Belgrade, Yugoslavia

SOURCE: Bulletin - Academie Serbe des Sciences et des Arts, Classe des Sciences Mathematiques et Naturelles: Sciences Naturelles (1976), 54(14), 53-73

CODEN: BASNA6; ISSN: 0352-5740

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reaction of $RCHO$ ($R = C_6H_{13}$, $n-C_7H_{15}$, $n-C_7H_{19}$, $n-C_{11}H_{23}$) with $HOCH_2CH(OH)CH_2OH$ gives mixts. of the corresponding cis- and trans-I with cis- and trans-II. The equilibrium cis-II-trans-II isomerization occurs without ring opening in a process catalyzed by hydride donors or acceptors, in which H- is abstracted from C-2. The isomerization of trans-I to cis-I follows a similar path; this reaction is irreversible as the H-bonded axial OH group in trans-I shields the C-2 carbonium ion and allows hydride abstraction to form only the cis product.

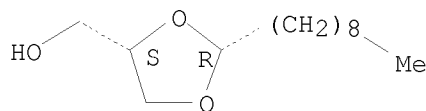
IT 18445-13-1P 18445-14-2P 18445-26-6P
18445-27-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and isomerization of, mechanism of)

RN 18445-13-1 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4S)-rel- (CA INDEX NAME)

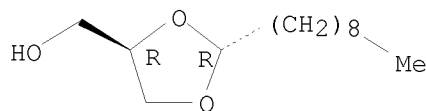
Relative stereochemistry.



RN 18445-14-2 CAPLUS

CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4R)-rel- (CA INDEX NAME)

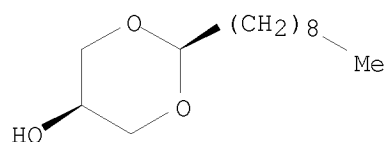
Relative stereochemistry.



RN 18445-26-6 CAPLUS

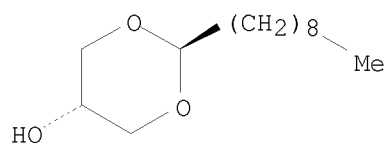
CN 1,3-Dioxan-5-ol, 2-nonyl-, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 18445-27-7 CAPLUS
CN 1,3-Dioxan-5-ol, 2-nonyl-, trans- (CA INDEX NAME)

Relative stereochemistry.



L11 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

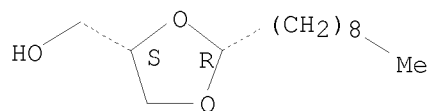
ACCESSION NUMBER: 1968:48985 CAPLUS
DOCUMENT NUMBER: 68:48985
ORIGINAL REFERENCE NO.: 68:9451a,9454a
TITLE: Structure of glycerol acetals
AUTHOR(S): Stefanovic, Djordje; Petrovic, Dj.
CORPORATE SOURCE: Univ. Belgrade, Belgrade, Yugoslavia
SOURCE: Tetrahedron Letters (1967), (33), 3153-9
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Glycerol treated with successive addns. of normal aliphatic aldehydes (C7-C14); the mixture refluxed in xylene in the presence of p-MeC6H4SO3H, heated alone in the presence or absence of catalyst, or refluxed in C5H5N without catalyst; the water of formation eliminated and the products distilled in vacuo gave the following condensation products (I) (n, b.p., and n_D given): 5 (Ia), b_{0.5} 102-14°, 1.4502; 6, b₃₀ 183-9°, 1.4509; 7, b₁₅ 169-79°, 1.4524; 8, b₁₅ 175-85°, 1.4540; 9, b₁₄ 182-92, 1.4553; 10 (Ib), b_{1.0} 174-86°, 1.4556; 11, b_{0.4} 170-82° (m. 16-20°), -; 12, b_{0.7} 199-218° (m. 18-22°), -. The separation of all 4 possible geometrical isomers of Ia and of Ib was carried out successfully by chromatog. and by distillation on a Podbielniak column. Thin layer chromatog. on silica gel, elution with 40:7:4 ligroine-Me3COH-EtOAc, and development with iodine, phosphomolybdic acid, and (or) SbCl5 showed the presence of 2 isomers (II, III) as major product when the acetals were prepared under kinetic control, whereas the isomers (IV, V) predominated when the synthesis was under thermodynamic control. The 4 acetals were separated both by gas chromatog. and column chromatog. on silica gel. The separation was effected by distillation and gave a series of isomers I-IV from each of the glycerol acetals. Determination of the ring structure by the method of Hill, Whelen, and Hibbert (CA 22: 3132) showed that IV and V were dioxanes and II and III had dioxolane structure. The determination of the stereochemistry of the 4 isomers of Ia was carried out by

ir and N.M.R. spectral analysis.
IT 18445-13-1P 18445-14-2P 18445-26-6P
18445-27-7P
RL: SPN (Synthetic preparation); PREP (Preparation)

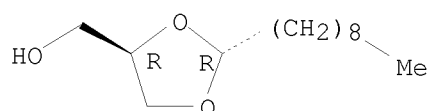
(preparation of)
 RN 18445-13-1 CAPLUS
 CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4S)-rel- (CA INDEX NAME)

Relative stereochemistry.



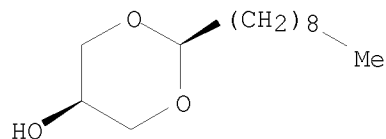
RN 18445-14-2 CAPLUS
 CN 1,3-Dioxolane-4-methanol, 2-nonyl-, (2R,4R)-rel- (CA INDEX NAME)

Relative stereochemistry.



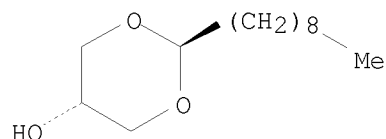
RN 18445-26-6 CAPLUS
 CN 1,3-Dioxan-5-ol, 2-nonyl-, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 18445-27-7 CAPLUS
 CN 1,3-Dioxan-5-ol, 2-nonyl-, trans- (CA INDEX NAME)

Relative stereochemistry.



=> FIL STNGUIDE
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
40.55	397.48

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-5.60	-5.60

CA SUBSCRIBER PRICE

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Oct 3, 2008 (20081003/UP).

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.36	397.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.60

FILE 'CAPLUS' ENTERED AT 09:18:58 ON 09 OCT 2008
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FILE COVERS 1907 - 9 Oct 2008 VOL 149 ISS 15
FILE LAST UPDATED: 8 Oct 2008 (20081008/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> d his

(FILE 'HOME' ENTERED AT 09:10:43 ON 09 OCT 2008)

FILE 'REGISTRY' ENTERED AT 09:10:51 ON 09 OCT 2008

L1 SCREEN 963
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 31 S L3 SSS FULL
L5 STRUCTURE UPLOADED
L6 QUE L5
L7 13 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008

L8 42 S L4
L9 18 S L7
L10 7 S L8 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 09:15:29 ON 09 OCT 2008

FILE 'CAPLUS' ENTERED AT 09:18:58 ON 09 OCT 2008

=> l4 and penetration
L4 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l4 and penetration
42 L4
114411 PENETRATION
1521 PENETRATIONS
115324 PENETRATION
(PENETRATION OR PENETRATIONS)
L12 1 L4 AND PENETRATION

=> d l12 ibib ab

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:841740 CAPLUS
DOCUMENT NUMBER: 141:320106
TITLE: Use of cyclic acetals and ketals for improved
penetration of drugs through cell and organ
barriers
INVENTOR(S): Harder, Achim; Heep, Iris; Herrmann, Stefan;
Grunkemeyer, Jeffry-Lynn; Kalbe, Jochen; Mehlhorn,
Heinz; Schmidt, Juergen; Schmahl, Guenther
PATENT ASSIGNEE(S): Bayer HealthCare AG, Germany
SOURCE: Ger. Offen., 21 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10314976	A1	20041014	DE 2003-10314976	20030402
CA 2520919	A1	20041014	CA 2004-2520919	20040325
WO 2004087117	A2	20041014	WO 2004-EP3155	20040325
WO 2004087117	A3	20050210		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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EP 1613354	A2	20060111	EP 2004-723211	20040325
EP 1613354	B1	20080820		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
US 20070270503	A1	20071122	US 2007-551882	20070115
PRIORITY APPLN. INFO.:			DE 2003-10314976	A 20030402
			WO 2004-EP3155	W 20040325
OTHER SOURCE(S):	MARPAT 141:320106			
AB	The invention concerns the use of cyclic acetals and ketals for improved			

penetration of drugs through cell and organ barriers, e.g. blood-brain barrier and placenta barrier. Thus a solution was prepared that contained (g): mebendazole 0.75; 2-nonyl-4-methanol-1,3-dioxalane and 2-nonyl-5-hydroxy-1,3-dioxane at a ratio of 9:1 3.73; N-methylpyrrolidone to 100.

=> d his

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L1 SCREEN 963
L2 STRUCTURE UPLOADED
L3 QUE L2 AND L1
L4 31 S L3 SSS FULL
L5 STRUCTURE UPLOADED
L6 QUE L5
L7 13 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008

L8 42 S L4
L9 18 S L7
L10 7 S L8 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 09:15:29 ON 09 OCT 2008

FILE 'CAPLUS' ENTERED AT 09:18:58 ON 09 OCT 2008

L12 1 S L4 AND PENETRATION

=> s L6 and penetration

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID

The query entered contains both search terms created by structure-building or screen commands and text search terms. L#s created via the STRUCTURE or SCREEN commands must be searched in the structures files separately from text terms or profiles. The L# answer sets from structure searches can be used in crossover searches and can be combined with text terms.

=> s l7 and penetration

18 L7
114411 PENETRATION
1521 PENETRATIONS
115324 PENETRATION
(PENETRATION OR PENETRATIONS)
L13 1 L7 AND PENETRATION

=> d l13 ibib ab

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:841740 CAPLUS

DOCUMENT NUMBER: 141:320106

TITLE: Use of cyclic acetals and ketals for improved penetration of drugs through cell and organ barriers

INVENTOR(S): Harder, Achim; Heep, Iris; Herrmann, Stefan; Grunkemeyer, Jeffrey-Lynn; Kalbe, Jochen; Mehlhorn, Heinz; Schmidt, Juergen; Schmahl, Guenther

PATENT ASSIGNEE(S): Bayer HealthCare AG, Germany

SOURCE: Ger. Offen., 21 pp.

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

CODEN: GWXXBX

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10314976	A1	20041014	DE 2003-10314976	20030402
CA 2520919	A1	20041014	CA 2004-2520919	20040325
WO 2004087117	A2	20041014	WO 2004-EP3155	20040325
WO 2004087117	A3	20050210		
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EP 1613354	B1	20080820		
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US 20070270503	A1	20071122	US 2007-551882	20070115
PRIORITY APPLN. INFO.: DE 2003-10314976 A 20030402				
WO 2004-EP3155 W 20040325				

OTHER SOURCE(S): MARPAT 141:320106

AB The invention concerns the use of cyclic acetals and ketals for improved penetration of drugs through cell and organ barriers, e.g. blood-brain barrier and placenta barrier. Thus a solution was prepared that contained (g): mebendazole 0.75; 2-nonyl-4-methanol-1,3-dioxalane and 2-nonyl-5-hydroxy-1,3-dioxane at a ratio of 9:1 3.73; N-methylpyrrolidone to 100.

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L1 SCREEN 963
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 L3 QUE L2 AND L1
 L4 31 S L3 SSS FULL
 L5 STRUCTURE UPLOADED
 L6 QUE L5
 L7 13 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008

L8 42 S L4
 L9 18 S L7
 L10 7 S L8 AND L9
 L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 09:15:29 ON 09 OCT 2008

FILE 'CAPLUS' ENTERED AT 09:18:58 ON 09 OCT 2008

L12 1 S L4 AND PENETRATION
L13 1 S L7 AND PENETRATION

=> s l10 and drug

821613 DRUG

365230 DRUGS

995294 DRUG

(DRUG OR DRUGS)

L14 1 L10 AND DRUG

=> d l14

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:841740 CAPLUS

DN 141:320106

TI Use of cyclic acetals and ketals for improved penetration of drugs
through cell and organ barriers

IN Harder, Achim; Heep, Iris; Herrmann, Stefan; Grunkemeyer, Jeffry-Lynn;
Kalbe, Jochen; Mehlhorn, Heinz; Schmidt, Juergen; Schmahl, Guenther

PA Bayer HealthCare AG, Germany

SO Ger. Offen., 21 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	DE 10314976	A1	20041014	DE 2003-10314976	20030402
	CA 2520919	A1	20041014	CA 2004-2520919	20040325
	WO 2004087117	A2	20041014	WO 2004-EP3155	20040325
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	US 20070270503	A1	20071122	US 2007-551882	20070115
PRAI	DE 2003-10314976	A	20030402		
	WO 2004-EP3155	W	20040325		
OS	MARPAT 141:320106				

=> d his

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L1 SCREEN 963

L2 STRUCTURE UPLOADED

L3 QUE L2 AND L1

L4 31 S L3 SSS FULL

L5 STRUCTURE UPLOADED
L6 QUE L5
L7 13 S L6 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:18 ON 09 OCT 2008

L8 42 S L4
L9 18 S L7
L10 7 S L8 AND L9
L11 7 DUP REM L10 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 09:15:29 ON 09 OCT 2008

FILE 'CAPLUS' ENTERED AT 09:18:58 ON 09 OCT 2008

L12 1 S L4 AND PENETRATION
L13 1 S L7 AND PENETRATION
L14 1 S L10 AND DRUG